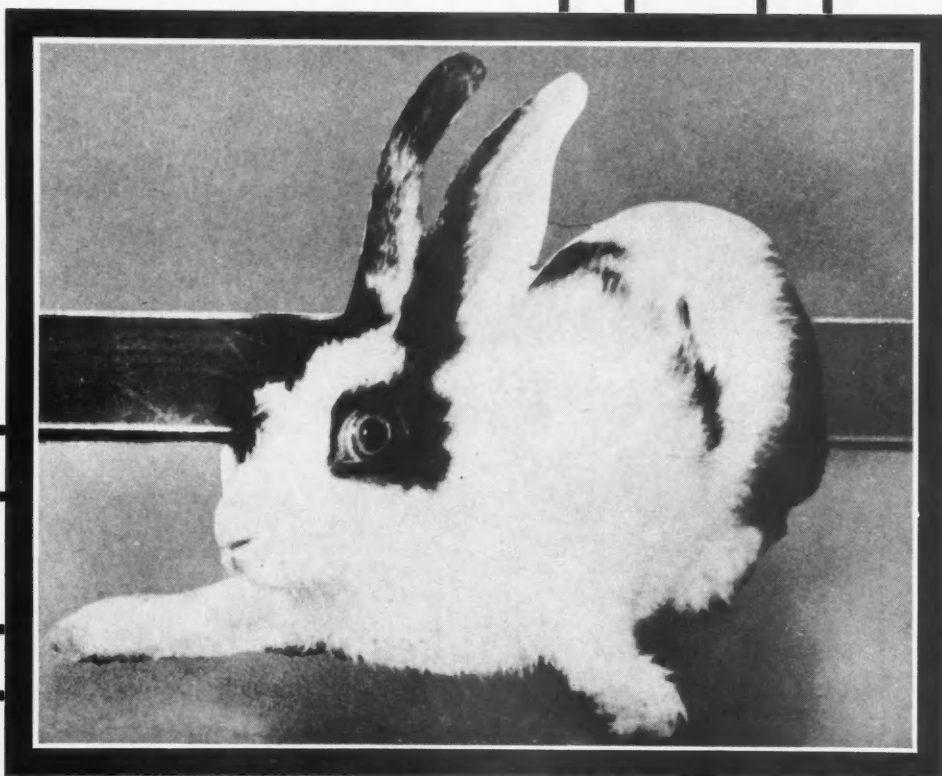


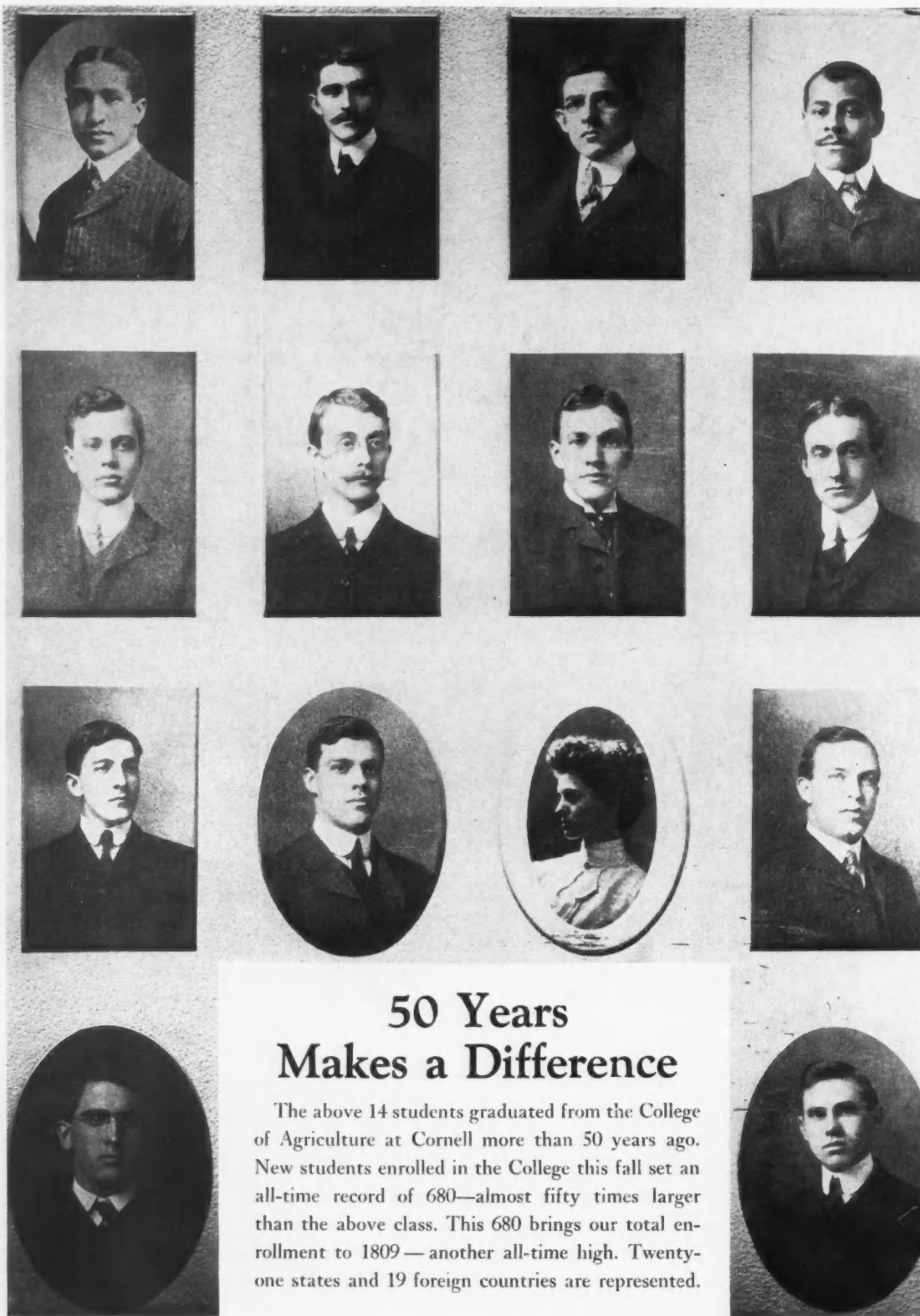
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Cornell Countryman

October 1961



Breeding Rabbits FOR EGGS ONLY6



50 Years Makes a Difference

The above 14 students graduated from the College of Agriculture at Cornell more than 50 years ago. New students enrolled in the College this fall set an all-time record of 680—almost fifty times larger than the above class. This 680 brings our total enrollment to 1809—another all-time high. Twenty-one states and 19 foreign countries are represented.

Cornell Countryman

Vol. LIX—No. 1

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Incorporated 1914

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OCTOBER, 1961

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Editorial

Be A Part Of Cornell

AS "Great fleas have little fleas . . ." so do great organizations have little organizations. Cornell University is no exception.

There is little reason, then, for any Cornellian—whatever his interests and ambitions—to feel like half a fish in an endless ocean. Isolation is for criminals, not college students.

True, academic achievement is the primary goal of most students. However, if it's a student's *only* goal, he's better off locked in the New York Public Library for four years. No one is interested in a walking encyclopedia—except, possibly, as a museum piece.

Well then, a good way to avoid this antiquated state of affairs is to pay some attention to Cornell's smaller organizations. The student groups on campus number into the hundreds. Some you may consider worth your while, others a waste of time. The functions of some may fascinate you, others bore you to tears. It is your job to determine which group or groups would hold your interest.

There are groups open to University students in general—Straight committees, CURW, Student Government, and scores of others. There are groups within each college which cater to special interests.

In the College of Agriculture, you will find that many departments sponsor clubs related to their fields, like the Floriculture, Pomology, and Agronomy Clubs. All of these are open to any interested student, but if you're majoring in the field, these clubs should be

especially valuable to you. There are also several less specialized groups in the Ag College—the Cornell Grange, 4-H Club, Ag-Dom Council, and the *Cornell Countryman*.

But no matter which group you join, participation in it can be a rewarding, enlightening, broadening experience. You will come into working association with people whose backgrounds and ideas are radically different from your own. You will be able to test the meaning and feasibility of your own ideas. You will be stimulated to formulate new ideas. You will achieve a sense of belonging and usefulness. You will further your individual development and find your place at Cornell.

I'm certainly not advocating that every student become a joiner and neglect his studies for group activities. But prerequisite to dealing effectively with people is to be one of them. The fastest way to discover what constitutes people is through contact with them. Student groups provide just this kind of stimulating contact.

If you haven't already done so, now is the time to become a part of Cornell University. Keep your eyes and ears open for announcements, and compet for one or two of Cornell's organizations.

J.E.B.

A Director Departs

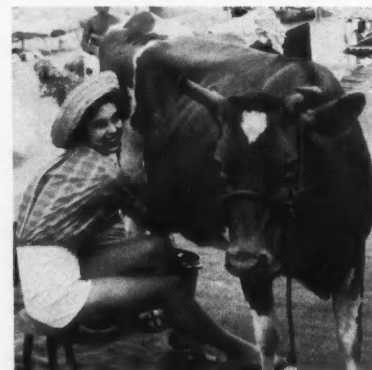
THE *Cornell Countryman* notes with regret the temporary departure of one of our directors, Prof. William B. Ward. At the request of the government of Argentina, Professor Ward will spend his year of sabbatical leave in that country as a public relations and communications advisor.

He will also work with universities in planning agricultural extension courses and assist in setting up a comprehensive information program in all mass media, including press, radio, and television, for the National Agricultural Research and Extension Agency of Argentina.

Professor Ward, who will be accompanied by his wife and four children, will work under the joint sponsorship of the Argentine government and the U.S. International Cooperation Administration.

We welcome in his stead Assoc. Prof. Charles C. Russell of the Department of Extension Teaching and Information. Before coming to Cornell, Dr. Russell was head of the Department of Journalism at the University of Arkansas. We know he will be a great help to the *Countryman* this year.

NO CONTEST



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Co-op = Campus Store

Every Cornellian knows that. But not everyone knows why the bottom half of Barnes Hall is popularly, though incorrectly, dubbed the "Co-op." The answer lies in its interesting past.

by Linda Whitman '61

EVERYTHING from books to baseballs—that's the Cornell Campus Store! Cornellians are familiar with the vast array of goods that the Campus Store offers. Many faculty members and students take advantage of the services offered by the Cornell retail establishment. These goods and services were not always so conveniently at hand. The story of the "Co-op"—when it was born and how it grew—is an interesting one.

A basement room in Morrill Hall was the predecessor of today's well-stocked Campus Store. The store

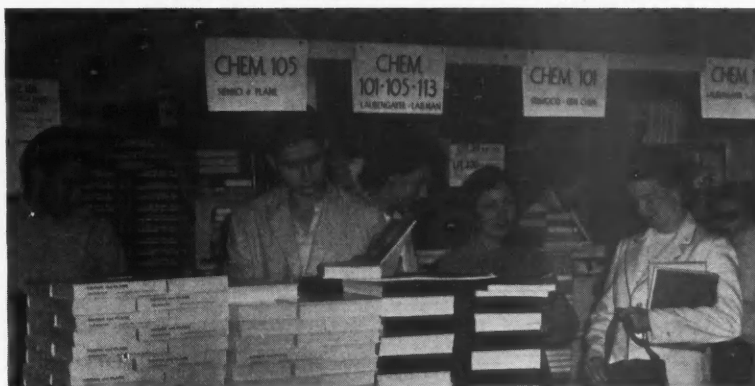
was the idea of a group of students and faculty members who saw the need for a convenient source of books, supplies, and other items important to college life. That was in 1895. The new business was planned as a student-faculty co-operative and was called the Cornell Co-operative Society, a name under which it operated for over 50 years.

The new society was joined by nearly 300 students and faculty members. A membership fee of one dollar and one dollar for annual dues were charged to members, and the business prospered. From the

beginning regular dividends were paid to the members. By 1905 there were more non-members than members on campus and the society decided to incorporate. Two hundred shares of stock were sold at five dollars per share. Ownership was restricted to members of the Cornell faculty and staff, one share to each. Being a stockholder was actually an honorary position since the return from a share was limited to 6 percent—about 30 cents a year.

When a stockholder severed his connection with the University, he ceased to be a stockholder. He re-

Book-buying time is hectic for both students and Co-op personnel.



turned his certificate to the society and was paid the face value. Many stock certificates were returned as the years passed, and only ten stockholders remained shortly after World War II.

University takes over

These ten offered their stock, plus all assets of the Society to Cornell University. The offer was accepted and the Society became a wholly owned subsidiary of Cornell. The name of the organization was changed to The Cornell Campus Store. A board of eight directors was set up to govern its operations. Today the board consists of nine directors who are Cornell faculty or staff members.

After 30 years—a new home

For thirty years students bought their clipboards and toothbrushes at the store in Morrill Hall. The store moved to the basement of Barnes Hall when Willard Straight opened its doors in 1925. A coffee shop had been in Barnes previously, but it was usurped by the Ivy Room, and in moved the Co-op.

Even these roomy quarters couldn't keep up with the growing University and corresponding student demand. The need for a larger store became pressing. Finally the other occupants of Barnes Hall moved out and relief was in sight. Work began on the cramped quarters in February 1953, and in January 1954, the store moved back into the two story Co-op we know today.



Gift department is especially popular before vacations.

Another Ivy Room

If you're a Cornellian, you've been to the Campus Store. It's one of the first places an incoming student heads for. On some days—especially around book-buying time—the Campus Store is more social than the Ivy Room. It's often the last place visited before leaving the campus, when dividend slips are exchanged for anything in sight. These dividend slips are valued like free money, especially among co-eds. Incidentally, the "Co-op slip" system began about 1925 and was the first dividend system of its kind in the country.

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Behind-the-scenes information about the Campus Store is willingly supplied by Philip J. Krebs, the store manager. Mr. Krebs' office is located, like an inner sanctum, behind the cashier and gift departments. It seems completely removed from the activity of the store just a few feet away. Mr. Krebs, Cornell class of '33, is tall, lean, and even has the classic distinguished grayed temples. He's been with the University since 1935, knows his business, and doesn't mind talking about it.

One thing Mr. Krebs mentioned is the underrated fact that the Cornell Campus Store undersells many other campus stores like Yale, Harvard, and Syracuse. "I'd love to have the students go up to Syracuse and price the same items," he grinned.

Serving the students

"We're here to serve the students," Mr. Krebs said. "Our buyers are always watching for good new items for their departments." He continued, "If a group of students have a particular need, we try to put the product on the counter for them." Evidently that's the way the snack counter originated. The girls of Sage Hall (once a women's dorm) petitioned for hosiery and food. Request granted.

In addition to meeting student needs, the store also supplies many items to the University. That's the reason for the large photography department.

Co-op loves Cornellians

Cornellians find the "Co-op" (an inaccurate term which is used nevertheless) both adequate and popular. And evidently the Campus Store employees are fond of Cornellians too. When asked if the sales personnel had any pet peeves about the Cornell shopper, Mr. Krebs replied with a smile, "Absolutely no complaints. The Cornellians are wonderful! There is no pilfering problem and the students are easier to deal with than those of many other areas."

This mutual appreciation is welcomed by all. It's hard to image hiking down to Ithaca every time a check must be cashed or a bar of soap bought. Especially in the winter!

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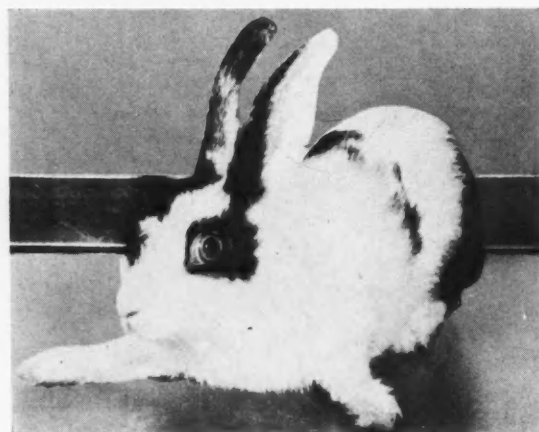
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Breeding Rabbits

FOR EGGS ONLY



Agricultural Research Service USDA

by Linda J. Himot '62

A STRAINED silence reigns over the small makeshift operating room in the basement of the Artificial Breeding Cooperative laboratory. All eyes are focused on the operating table. The anesthetist slowly and carefully injects Nembutal into the ear vein of a Dutch Belted rabbit. Slowly the rabbit relaxes and falls asleep. Its breathing is regular.

The needle is withdrawn from the vein, a signal which breaks the spell over the room. Suddenly there is a bustle of activity. Eight students and an instructor quickly and with the efficiency of weeks of experience carry out the tasks assigned to each of them.

These students are all members of a course in animal husbandry on the fundamentals of endocrinology taught by Dr. William Hansel. As part of the course Dr. Hansel feels the students should get an



Photo Science

Nembutal is injected into the rabbit's ear vein.

opportunity to do some actual research. This group, one of seven, each working on a different project, is trying to transfer fertilized eggs from one rabbit, the donor, to a non-pregnant rabbit, the recipient. They hope that the "foster" mother will nourish the developing embryos and give birth to live young.

Some researchers expect that this technique of "ovum transfer" may some day be used with cattle to produce more high quality cows and steers. High producing cows may be bred artificially with semen from bulls of proven genetic merit and the fertilized ova removed. These ova may then be transferred to poorer cows which will serve as live incubators.

Experiment has economic value

The farmer can then breed his outstanding cows many times a year and obtain many more calves from them. Since the less valuable foster mothers have no effect on the genetic makeup of the offspring, their "stepchildren" should have the desirable qualities of their genetic parents and be high quality animals.

Enthusiasm prevails among the young group of amateur surgeons. "There are many difficulties involved and many techniques to master but the prospects for success are bright," they say. Through a system of rotation, they all get

an opportunity to perform each step of the operation. Repeated attempts at the experiment, they hope, will make all expert technicians.

The day before

On the day before the operation, a Dutch Belted rabbit, who will be the donor, is mated to a normal buck. At the same time, a New Zealand rabbit, who will be the recipient, is mated to a sterile New Zealand buck. This second mating puts the recipient rabbit in the same phase of the estrous cycle as the donor. Copulation sets off a series of hormonal actions even though fertilization does not occur. The recipient's uterus will then be prepared to accept the transferred ovum and will nourish it until parturition, or birth.

There is always the problem that the recipient's mate is not sterile or the recipient herself was pregnant before the operation. To be sure that the young she produces are actually foster young which developed from the donor's ova, the recipient is always a New Zealand rabbit. The New Zealands are all white, and under normal breeding conditions will produce only white offspring. Dutch Belted rabbits, the genetic mothers, are black and white. If the New Zealand progeny have the characteristic Dutch Belted color pattern,

then they must be foster offspring.

On the day of the operation the donor and the recipient are carefully weighed to determine Nembutal dosages. This drug has a very narrow and critical tolerance range and therefore must be carefully administered. If too little is given, the rabbit may awaken in the middle of the operation. If she receives too much anesthesia, the rabbit may die. And, the group reports, fatalities due to overdoses sometimes occur.

When the donor is unconscious, its abdomen is shaved and washed. An incision is made and the body cavity exposed. The oviducts are carefully flushed to obtain the eggs. The flushing fluid is examined under a dissecting microscope to find the eggs which are usually in the two or four-cell stage of development.

The eggs are carefully picked up with a pipette (desperately needed: a steady hand!) and transferred to the oviduct of the recipient rabbit. Transfer of the eggs marks the end

of the operation. The rabbit is sewed up and returned to its cage. Since the gestation period, or time between fertilization and birth, is thirty days, the group must wait a month to find out if their efforts were fruitful. But confidence is not without due cause. "We proudly announce the birth of four rabbits to one of our foster mothers."

Future possibilities

The jump from rabbits to cows is a big one, but one which could occur in the not too distant future. . . . only a matter of time now before another Aldous Huxley's *Brave New World* predictions comes true. . . . step from live incubators to mechanical ones and test tube babies is not big. . . . merely requires some mechanical ingenuity.

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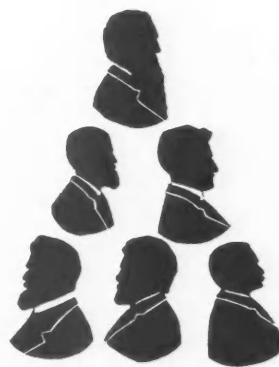
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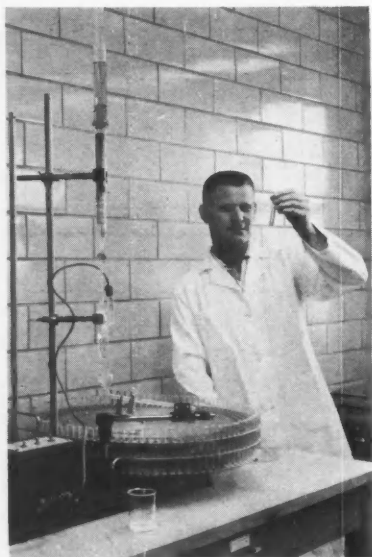
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Roger Simmons, research assistant, operates a fraction collector which automatically dispenses accurate and equal amounts of any chemical in a series of test tubes.



Robert Simkin, science teacher, feeds a rat colony used for experimental purposes.



FRANK B. MORRISON was not only a builder of an industry; he was a builder of men who in turn have left their mark on the various fields of animal science," commented Dr. James H. Hilton, president of Iowa State University.

Dr. Hilton continued, "His book on *Feeds and Feeding* has not only been the text for the nutrition courses in our Land-Grant colleges and universities in America, it is used throughout the world by teachers and producers of livestock. I wonder if this country will ever produce his like again?"

As head of the animal husbandry

CORNELL COUNTRYMAN



Frank B. Morrison Hall

department from 1928 through 1945, Professor Morrison built the department into one of the world's largest and best. During his tenure, new livestock barns were built, better livestock was purchased, graduate training programs were strengthened, high-quality young scientists were added to the staff, undergraduate courses were revitalized, and extension programs were made more valuable and informative. And in his honor, Frank B. Morrison Hall, the new home of animal husbandry at Cornell, was dedicated on September 12-13, 1961.

The new building will enable the animal husbandry staff to do a more efficient and expanded job in three main areas—teaching, research, and extension work. Its three acre plot sits at the intersection of Tower and Judd Falls Roads, just beyond the Dairy Bar.

The building contains several classrooms and laboratories, the latest equipment, facilities for extension teaching, and specialized provisions for research projects. Noteworthy is the extensive setup for research in artificial breeding.

Speaking at the dedication ceremonies, Governor Rockefeller of New York concluded, "... we dedicate this building not only to the memory of an outstanding man, not only to agricultural progress, but to a better future for mankind."

Paul Reynolds, graduate assistant in animal nutrition, helps Sue Spitz, lab technician, operate a large Kjeldahl apparatus to determine the nitrogen content of feeds and waste materials.



Prof. James R. Stouffer and August Diekmann operate a Sonoray machine for a profile picture of the depth of fat on a steer's back.



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Our Alums At Work

The Alumni Association of the College of Agriculture is an active organization with an interesting history. It emphasizes "opening the doors" to those who are interested in agriculture.

by Bernard Curvey
Admissions Counselor

THE Alumni Association of the New York State College of Agriculture began on the evening of February 25, 1909 in a meeting of students and former students of all classes and courses. Dean Liberty Hyde Bailey addressed the first assembly on the needs of the College of Agriculture. The first organization, the Students' Association of the New York State College of Agriculture, included all present students and all who had ever been students of the College. This feature lasted only a few years and in 1917 an amendment to the constitution changed the organization and name to their present form.

The aims and purposes of the Association were: (1) To promote fellowship among all students, past and present; (2) To advance the interests of the College of Agriculture in all ways; (3) To promote country life interests at large.

Today, these objectives still hold, but the areas covered by these objectives have expanded broadly.

A major activity currently carried on by the Association is helping the College of Agriculture inform qualified students of the educational and career opportunities available through the College.

To assist in this program the Alumni Association has set up a vast organizational network made up of over 400 alumni who cover all of New York State. This group includes the seven officers of the Association, or the directors of this program; twelve regional directors who are responsible for the activities of from

three to seven counties; sixty county chairmen that plan and develop a high school contact program in accordance with the needs of the county; and approximately 350 county keymen who work closely with one or two county high schools in their locality.

The objectives of this effort are threefold: first, to promote and develop a better understanding with school guidance counselors about entrance requirements and the wide variety of courses offered by the College; second, to develop contacts and to stimulate the interest of parents, and students who are best qualified for entrance; third, to coordinate the county activities with those of the Office of Resident Instruction for the College.

Other activities of the Alumni Association are to (1) Arrange and schedule boys to attend the "College Open House" activities sponsored jointly by the College and the Alumni Association; (2) Sponsor the annual Alumni luncheon held during Agricultural Progress Days; (3) Award a \$50 prize to the sophomore and junior having the highest cumulative average; (4) Elect a member to the board of trustees of the Cornell Alumni Association, and (5) Sponsor this page in every issue of the *Cornell Countryman*.

There are now approximately 1000 members of the Alumni Association. All former students and members of the Staff and experiment station are eligible for membership and shall become members on the payment of the regular fee of two dollars per year.

ASSOCIATION OFFICERS

(Seated) Donald G. Robinson '41, Vice President; Nelson F. Hopper '39, President; Donald Whiteman '39, Vice President; (Standing) Robert H. G. Greig '36, Vice President; Morton Adams '33 and Russell M. Cary '36, past presidents; (not pictured) Stanley W. Warren '27, Secretary-treasurer.



A Nigerian Village Gains

Pounds from Peanuts

The people of Nigeria owe a great deal to Dr. Hazel M. Hauck for her discovery of an inexpensive food to supplement their protein deficient diet. Dr. Hauck retired this summer from her positions as professor in the College of Home Economics and staff member of the Graduate School of Nutrition. Previous to the Nigerian project she spent a year in Thailand studying food habits and ways to improve them. Because she finds nutritional work on the village level very rewarding, she doesn't want to give it up with retirement but hopes to do similar work in other needy areas of the world. Ed.

by Jane E. Brody '62

THE hungry, expressionless face of a three-year-old girl weighing less than ten pounds—this is what faced Prof. Hazel M. Hauck, Cornell nutritionist, when she arrived in the Nigerian village of Awo Omamma. The cause? Malnutrition. The reason? A basic diet high in starch and very low in protein and riboflavin.

Under the sponsorship of the Unitarian Service Committee of Boston, Dr. Hauck spent a year in Awo Omamma to teach the villagers how to fight malnutrition, one of the main contributors to a 50 percent infant mortality rate.

Malnutrition, observes Dr. Hauck, is the inevitable result of the ill-balanced diet common throughout Nigeria. The villagers "never think in terms of quality of food; it is just something to fill their stomachs," she notes. Basically, their diet consists of "fufu", a starchy paste made from yams or cassava meal, and a soup of dried fish, palm oil, and green leaves. Sufficient body-building protein and the essential vitamin riboflavin are not included.

So began the search for a native food which could provide the villagers with these vital nutrients. The search soon ended. Dr. Hauck observed the village women bargaining for roasted peanuts in the market

place. If anything is a good protein booster, the peanut is.

However, these peanuts did not supply enough protein to fill the villagers' body needs. They were consumed as between meal snacks in very small quantities. Traders obtain the peanuts in the green raw state. Then they roast them in hot soil, and grit clings to the riboflavin-rich skin. Before the peanut can be eaten, the skin has to be peeled away and much of the food value is lost.

New way of roasting

It was a challenging task, notes Dr. Hauck, to increase native consumption of the peanut in its most nutritional form. The ready roasted nuts are too expensive for the villagers to buy in large quantities. Dr. Hauck realized that buying the peanuts in the raw state would cut their cost in half. The peanuts then had to be roasted in a way that would not render the skins inedible. Large iron pots found in every village household are suitable utensils for roasting peanuts without spoiling the skin, she found.

But by far the most difficult problem was getting the Nigerians to accept and utilize these changes and to eat what is good for them. Awo Omamma consists



Peanuts in small amounts are displayed by woman trader in market place in Nigerian village. Once consumed only as between-meal snacks, the peanuts are used as a major food staple in Awo Omamma to enrich the daily diet.



Cassava is displayed in quantity in the village market place at Awo Omamma. The starchy foods—cassava and yams—have long been the basis of the native diet.

of twenty kindred groups. Dr. Hauck worked with mothers from four kindreds. With the aid of a local girl as interpreter, she explained what she wanted to accomplish to these women. Each one was then given some peanut flour to use in preparing her meals for one day. The next day she reported how she had used the flour and what other ingredients she included in her cooking.

Dr. Hauck discovered that the natives liked the taste of the peanut flour. One barrier was now crossed. It's rather difficult to get people to eat something they don't like, no matter how good it is for them. At the same time, Dr. Hauck gathered valuable information about the natives' eating habits.

Ground-up peanuts and cowpeas, another inexpensive source of protein, are now used instead of starchy yams to thicken soup. Dr. Hauck had little

trouble explaining the need for these "foods for growth" to the poorly nourished villagers. In a country where children are loved and valued, anything which reduces infant mortality is readily accepted.

Infants are especially susceptible to malnutrition. The starchy food they receive as a supplement to breast-feeding provides none of the protein, minerals, and vitamins essential to growth. Also, "because of prejudice in some areas of Nigeria, animal food is not given to children," says Dr. Hauck.

Better use of resources

But dietary improvement is certainly not dependent upon extended use of expensive animal foods. Rice and other cereal grains, if substituted for cassava and yams, can substantially increase the protein content of the Nigerian diet, Dr. Hauck concludes. "Agricultural production should certainly be improved, but enough food of a suitable kind already is produced so that serious malnutrition need not be common—if the people know how to use their resources," she adds.

Dr. Hauck finds that the satisfaction derived from nutritional work at the village level often stems from small but meaningful gains. In Nigeria, the ten pound three-year-old was the symbol of success. She was fed peanut flour and after a few weeks had gained two pounds. At this time, Dr. Hauck visited her. In serious cases of nutritional deficiency, very often the first sign of improvement is a smile. When this little girl, once completely apathetic, smiled, onlookers burst into applause.

For mere peanuts, the health of 18,000 Nigerians has been improved.



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BIRD-CALL recordings, clock-work crickets, and starving Indians were the subjects of prize winning *Countryman* articles last term. The Paul R. Guldin Memorial awards are monetary recognition for outstanding *Countryman* articles which encourage more adequate rural leadership.

Last spring, Virginia Wolf '61 won the first prize of \$75 for her article, "Crickets, a Key to our Clocks." Jane E. Brody '62 wrote "We Want More Food" which won the second prize of \$50. Jane P. Doyle won the \$25 third prize for her article, "Audio Ornithology."

Honorable mentions were awarded to Andrew Voninski '64 for "More Market Power for Farmers"; James Sample '63 for "Music Pierces the Iron Curtain"; and Tina Bloomstein '63 for "Buzzz Is Not All They Say."

Congratulations to all and best wishes for future successes.—Ed.

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by Elizabeth Corning '60

ESTIMATES indicate that if the history of the world were compressed into the time span of a single day, the history of man would fill less than a minute of that day. The only record of life during that long period before man's existence is in the form of fossils—the remains and imprints of plants or animals in stone and hardened mud.

In 1922, Dr. L. C. Petry started a collection of New York State plant fossils at Cornell University. Dr. Harlan P. Banks, head of the Department of Botany, is now in charge of this collection. Dr. Banks, and all other paleobotanists (those

who study ancient plant life), want to find out what sorts of plants are represented by fossil remains. The ancient plants are considered the ancestors of the plants we now have, and paleobotanists try to determine the relationships between the two.

According to Dr. Banks, New York is very rich in plant fossils. Much of the rock exposed to the surface is of a time period known as Devonian. This time period, the age of the very earliest land plants, was about 325 million years ago.

It is supposed that plant life began in the sea. As time went on plants evolved to the land and de-

veloped more complex structures. The Devonian rock (so called because it was first studied near Devon, England) contains the impressions and remains of these very early land plants. Sometimes the impressions only look like a straight black line, but often they show the marks of leaves or branches coming off the stem. It is this type which especially interests Dr. Banks. "We are interested in fossils with a little character to them. If they have no distinctive features, then it is impossible to identify them."

Dr. Banks mentions that there are many places in New York particularly rich in good fossils. "If



Fig. 1



Fig. 2



Fig. 3

Figure 1 shows stems which appear to bear small appendages collected in Schoharie County. In the laboratory, such stems can be freed from the rock by acid treatment. If the plants were flattened and carbonized, they resemble Figure 2 after treatment. If they decayed badly before fossilization and only their waxy cuticle remains, they appear as in Figure 3. These specimens prove that the stems lacked true leaves and are representatives of the most primitive type of land plant.



Plant with leaf scars found in marine rock.

you connect Albany and Buffalo by an imaginary line, the bulk of the rocks south of this line are Devonian, and may contain good fossils."

There are several places especially good for fossil finds. One of these is new road cuttings. The blasts split rocks and expose new fossils. When Dr. Banks hears about a new cutting he goes out to the area to search for fossils. Carrying a pick and digging into rock, he is often

mistaken for a prospector. "People's first thought is that I'm looking for gold." It's difficult to explain that fossil hunters have no economic purpose in mind.

Two other places are rich in plant fossils. One is the quarries whose rock is used in building new roads. The other is in any exposed shale. The shale, which readily splits into layers, will often have excellent imprints of Devonian plants.

When Dr. Banks is not out hunting fossils, he spends much time at Cornell in a room completely filled with them. Shelves filled with rocks containing embedded or imprinted fossils go right up to the ceiling. In addition, boxes of rocks are under the tables, on the tables, and even on the chairs.

New York Devonian fossils make up most of the collection, and it is on these that Dr. Banks does his research. There are also fossils from the other time periods which are used in teaching.

Dr. Banks wants New Yorkers to send him any plant fossils that they find. "We sometimes get them sent in by school teachers and a few interested fossil hunters, but we would like to hear from anyone who finds them. Anyone who would like to have plant fossils identified can send them to me at the botany department at Cornell," he offers. If possible, he will tell you what it is. At the same time, you may help unravel some of the secrets of the past.

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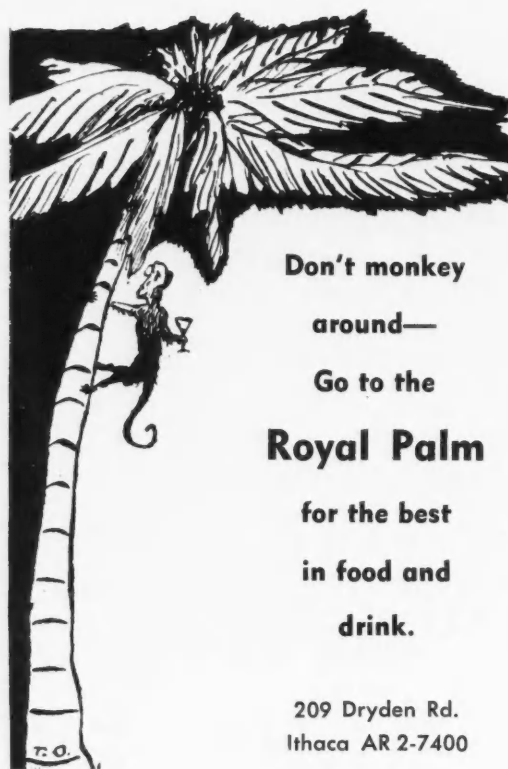


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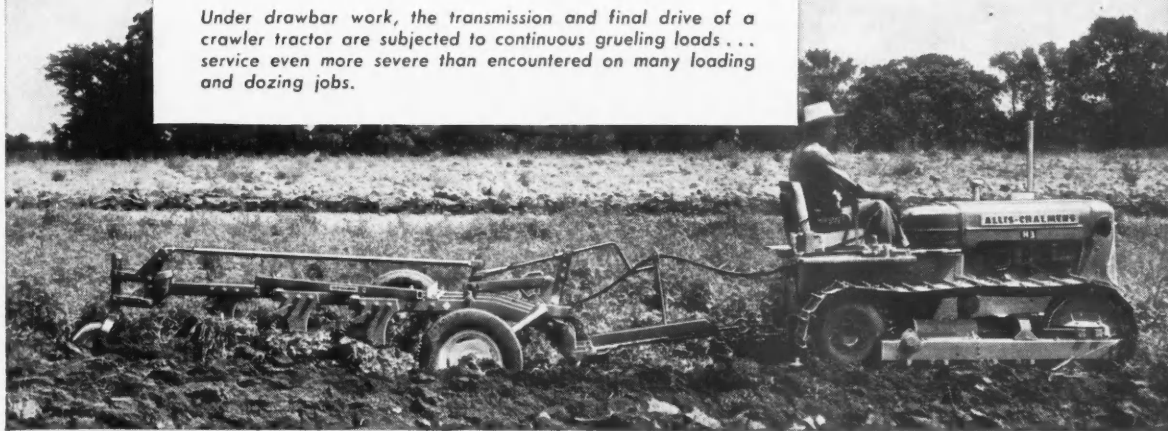


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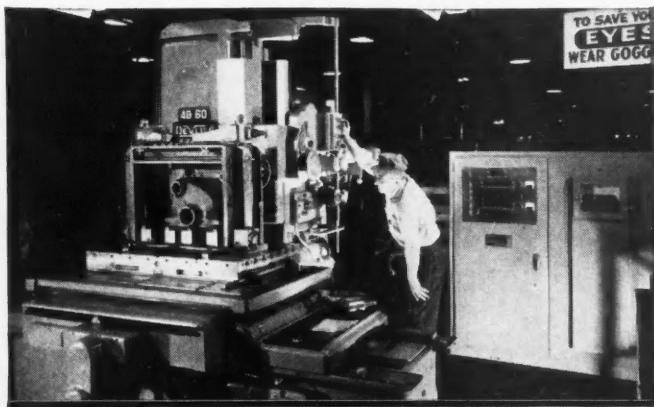
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